

AMENDMENTS TO THE CLAIMS

Please enter the following amendments:

1. (Currently Amended) A plasma display unit ~~at least containing~~ comprising:
a front panel and a rear panel in a confronting arrangement via discharge space, ~~the front panel~~ having a plurality of display electrode pairs disposed on a glass substrate;~~and the~~
a rear panel in a confronting arrangement via discharge space, having a plurality of address electrodes that forms discharge cells in combination with the display electrode pairs;
and
a phosphor layer for emitting by discharging, comprising ~~wherein in the case that a~~
a main material including a first oxide, and
a second oxide containing an element with electronegativity larger than the oxide
included in the main material;
wherein
the surface of the phosphor layer bears ~~would bear~~ a positive (+) charge ~~when~~ if the phosphor layer is were formed ~~of main material alone~~ without the second oxide, and
the second an oxide ~~containing an element with electronegativity larger than an oxide~~
~~included in the main material~~ is added ~~or used as a coating material~~ such that the absolute value
of the charge of the phosphor layer does not exceed 0.01 $\mu\text{C/g}$ ~~in order to suppress an amount of~~
~~charge of the phosphor layer within $\pm 0.01 \mu\text{C/g}$.~~
2. (Currently Amended) The plasma display unit of Claim 1, wherein the main material including the first oxide is formed of an aluminate-based green phosphor of $\text{BaAl}_{12}\text{O}_{19}:\text{Mn}^{2+}$.

3. (Currently Amended) The plasma display unit of Claim 1, wherein the main material including the first oxide is formed of a yttrium oxide-based green phosphor of $(Y, Gd)BO_3:Tb^{3+}$.

4. (Currently Amended) The plasma display unit of Claim 1, wherein the main material including the first oxide is formed of an aluminate-based blue phosphor of $Ba_{1-x}MgAl_{10}O_{17}:Eu_x^{2+}$ or $Ba_{1-x-y}Sr_yAl_{10}O_{17}:Eu_x^{2+}$, where $0.03 \leq x \leq 0.3$ and $0.1 \leq y \leq 0.5$.

5. (Currently Amended) The plasma display unit of Claim 1, wherein the main material including the first oxide is formed of a yttrium oxide-based red phosphor of $(Y, Gd)BO_3:Eu^{3+}$ or $Y_2O_3:Eu^{3+}$.

6. (Currently Amended) The plasma display unit of Claim 1, wherein the second oxide containing an element with electronegativity larger than the oxide included in the main material is at least any one of titanium oxide (TiO_2); tin oxide (SnO_2); germanium oxide (GeO_2); tantalum oxide (Ta_2O_5); niobium oxide (Nb_2O_5); vanadium oxide (V_2O_5); molybdenum oxide (MoO_3); boron oxide (B_2O_3); silicon oxide (SiO_2); and antimony oxide (Sb_2O_3).

7. (Currently Amended) A plasma display unit ~~at least containing~~ comprising:
a front panel and a rear panel in a confronting arrangement via discharge space, ~~the front panel~~ having a plurality of display electrode pairs disposed on a glass substrate;~~and the~~
a rear panel in a confronting arrangement via discharge space, having a plurality of address electrodes that forms discharge cells in combination with the display electrode pairs;
and
a phosphor layer for emitting by discharging, comprising ~~wherein in the case that~~
a main material including a first oxide, and
a second oxide containing an element with electronegativity smaller than the
oxide included in the main material;
wherein
the a surface of the phosphor layer bears would bear a negative (-) charge when if the
phosphor layer is were formed of main material alone without the second oxide, and
the second an oxide containing an element with electronegativity smaller than an oxide
included in the main material is added or used as a coating material such that the absolute value
of the charge of the phosphor layer does not exceed 0.01 $\mu\text{C/g}$ in order to suppress an amount of
charge of the phosphor layer within $\pm 0.01 \mu\text{C/g}$.

8. (Currently Amended) The plasma display unit of Claim 7, wherein the main material including the first oxide is formed of a silicate-based green phosphor of $\text{Zn}_2\text{SiO}_4\text{:Mn}^{2+}$.

9. (Currently Amended) The plasma display unit of Claim 7, wherein the second oxide containing an element with electronegativity smaller than the oxide included in the main material is at least any one of zinc oxide (ZnO); yttrium oxide (Y₂O₃); aluminum oxide (Al₂O₃); bismuth oxide (Bi₂O₃); magnesium oxide (MgO).

10. (Currently Amended) A phosphor comprising:
a main material including a first oxide, and
a second oxide containing an element with electronegativity larger than the oxide
included in the main material;
wherein
the surface of the phosphor would bear a positive (+) charge if the phosphor were formed
without the second oxide, and
the second oxide is added such that the absolute value of the charge of the phosphor does
not exceed 0.01 μ C/g having an amount of charge suppressed within +0.01 μ C/g obtained by
adding an oxide as a submaterial containing an element with electronegativity larger than an
oxide of main material into the main material, or by applying the oxide as a coating material on a
surface of a phosphor layer, in the case that the surface of the phosphor layer bears positive (+)
charge when the phosphor layer is formed of main material alone.

11. (Currently Amended) The phosphor of Claim 10, wherein the main material including the first oxide is formed of an aluminate-based green phosphor of BaAl₁₂O₁₉:Mn²⁺.

12. (Currently Amended) The phosphor of Claim 10, wherein the main material including the first oxide is formed of a yttrium oxide-based green phosphor of $(Y, Gd)BO_3:Tb^{3+}$.

13. (Currently Amended) The phosphor of Claim 10, wherein the main material including the first oxide is formed of an aluminate-based blue phosphor of $Ba_{1-x}MgAl_{10}O_{17}:Eu_x^{2+}$ or $Ba_{1-x-y}Sr_yMgAl_{10}O_{17}:Eu_x^{2+}$, where $0.03 \leq x \leq 0.3$ and $0.1 \leq y \leq 0.5$.

14. (Currently Amended) The phosphor of Claim 10, wherein the main material including the first oxide is formed of a yttrium oxide-based red phosphor of $(Y, Gd)BO_3:Eu^{3+}$ or $Y_2O_3:Eu^{3+}$.

15. (Currently Amended) The phosphor of Claim 10, wherein the second oxide containing an element with electronegativity larger than the oxide included in the main material is at least any one of titanium oxide (TiO_2); tin oxide (SnO_2); germanium oxide (GeO_2); tantalum oxide (Ta_2O_5); niobium oxide (Nb_2O_5); vanadium oxide (V_2O_5); molybdenum oxide (MoO_3); boron oxide (B_2O_3); silicon oxide (SiO_2); and antimony oxide (Sb_2O_3)

16. (Currently Amended) A phosphor comprising:
a main material including a first oxide, and
a second oxide containing an element, with electronegativity smaller than the oxide
included in the main material;
wherein
the surface of the phosphor would bear a negative (-) charge if the phosphor were formed
without the second oxide, and
the second oxide is added such that the absolute value of the charge of the phosphor does
not exceed 0.01 $\mu\text{C/g}$ having an amount of charge suppressed within $+0.01 \mu\text{C/g}$ obtained by
adding an oxide as a submaterial containing an element with electronegativity smaller than an
oxide of main material into the main material, or by applying the oxide as a coating material on a
surface of a phosphor layer, in the case that the surface of the phosphor layer bears negative (-)
charge when the phosphor layer is formed of main material alone.

17. (Currently Amended) The phosphor of Claim 16, wherein the main material
including the first oxide is formed of a silicate-based green phosphor of $\text{Zn}_2\text{SiO}_4\text{:Mn}^{2+}$.

18. (Currently Amended) The phosphor of Claim 16, wherein the second oxide
containing an element with electronegativity smaller than the oxide included in the main material
is at least any one of zinc oxide (ZnO); yttrium oxide (Y_2O_3); aluminum oxide (Al_2O_3); bismuth
oxide (Bi_2O_3); magnesium oxide (MgO).